Atomic Research

An outgrowth of the wartime atomic energy project of the National Research Council is a publicly-owned company called Atomic Energy of Canada Limited. This company was formed to exploit the discovery of nuclear fission for peacetime use in industry, agriculture, medicine and other fields.

Established at Chalk River, not far from Ottawa, the company employs twenty-four hundred persons and in the first ten years of its operation spent about $160,000,000 of public funds. Three reactors, employing uranium and heavy water, were in operation by 1957 and plans were being laid for the first Canadian power-producing reactor designed to generate electricity for industrial use. It is to this end that the company's main energies are now directed.

One of the company's big projects has been the production of large quantities of radioactive isotopes for use in industry, agriculture and medicine. Another has been the development of the cobalt therapeutic unit for use in cancer treatment. The company is now able to equip about thirty hospitals a year with these units, which have been installed not only in Canada but in the United States, in six European countries and in Burma under the Colombo Plan.

In 1955, Canada, under the Colombo Plan, offered to help in the construction in India of an NRX-type reactor similar to the one at Chalk River. The offer was accepted and the Canada-India Reactor (CIR), a joint Indian-Canadian enterprise with costs and responsibilities shared by both countries, has as a result been constructed near Bombay.

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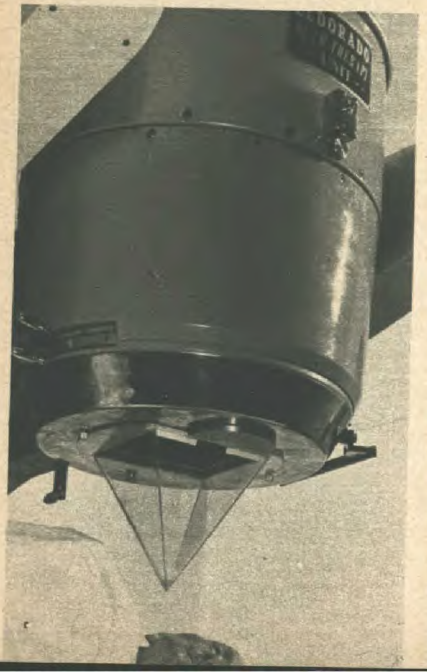

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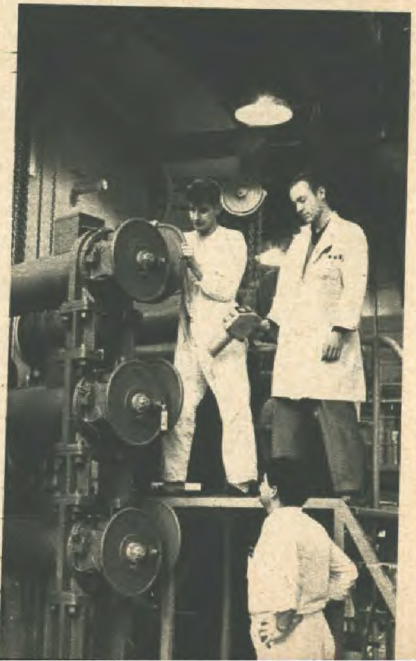

DEFENCE

Defence has become an inescapable part of the national life in Canada. The reasons for this lie in geography. Canada is midway between Europe and Asia, and midway between the Soviet Union and the United States. Its territory, in fact, is in the path of the shortest air routes linking five continents.

The Department of National Defence is responsible for all matters pertaining to defence. Enlistment in the three armed services (of which the army is the largest) is on a voluntary basis. A part-time reserve force supplements the regular forces.

A Defence Research Board concentrates on research problems of particular importance to Canada's defence. Besides such matters as anti-submarine warfare, new weapons, and aeronautical electronic and medical research, continuing investigations into Arctic and sub-Arctic warfare are conducted at Defence Research National Laboratories.

A Civil Defence programme has been developed under a federal coordinator but operates within the framework of government at the federal, provincial and municipal levels. Each province is a self-contained unit, divided for purposes of civil defence into mutually supporting areas.

1) The cobalt beam therapy unit attacking cancer cells

2) Part of the NRX reactor at Chalk River, Ontario

3) HMCS "St. Laurent", a modern Canadian destroyer escort

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